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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/556,710

11/11/2005

Stefan Lidbrink

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7590

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EXAMINER

DOAN, PHUOC HUU

ART UNIT

PAPER NUMBER

2617

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/556,710	Applicant(s) LIDBRINK, STEFAN	
	Examiner PHUOC H. DOAN	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-13, 16-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 14, 15 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 11-13, 16-18, and 20** are rejected under 35 U.S.C. 102(e) as being anticipated by **Hunt (US Pub No: 2003/0013452)**.

As to claim 11, Hunt discloses a method in a cellular mobile telecommunication system for cell planning and preparing for a cell split “**Fig. 1, items 106, 104; a plurality of pico cells**” when a cell tends to get congested or overloaded (page 1, par. [0006]), said method comprising the steps of: registering position related data comprising the locations for mobile users (MS) together with what service is used by each user in terms of bit rate (page 2, par.[0022-0024]; “**control channel and mobile device where the position of mobile device related the user data to number of cells based on control sub-channel management will require high data rates, but it will be sent in a packet format such as short blocks of data, rather than continuous transmission**”); and, creating an estimation of the traffic

density within the cell as a function of said position related data (page 3 par.

[0029-0031]; **“the macro cell BS 104 may also instruct the chosen pico cell BS 108 to vary transmission parameters such as data rate to modify the quality of the chosen link based on the position related data”**).

As to claim 12, 17, Hunt further discloses the method of claim 11, further comprising the step of registering the path losses experienced on the radio channels of the mobiles (page 3 par. [0029]; **“path losses based on the measurement of Signal to Interference Ration (SIR)”**).

As to claim 13, Hunt further discloses the method of claim 11, wherein an optimal site for a new base station is established based on the registered data (page 3 par. [0034]; **“to allow roaming users to connect directly to their home network for control”**).

As to claim 16, Hunt discloses a cell planning tool for preparing for a cell split **“Fig. 1, items 106, 104; a plurality of pico cells”** in a cellular telecommunication system, comprising: a control network for registering the location of mobile stations rate (page 2, par.[0023-0024]; **“control channel and mobile device**

where the position of mobile device related the user data to number of cells based on control sub-channel management”); means for registering the services used by the mobile stations; and, means for, based on the location and service data, estimating the traffic density of the cell (page 3 par. [0029-0031]; **“the macro cell BS 104 may also instruct the chosen pico cell BS 108 to vary transmission parameters such as data rate to modify the quality of the chosen link based on the position related data”**).

As to claim 18, Hunt further discloses the cell planning tool of claim 16, wherein an optimal location for a new site is established in a cell planning system node (page 3, par. [0033-0034]).

As to claim 20, Hunt discloses a cellular telecommunication system comprising base stations and mobile stations in communication with each other in a cell under supervision of a control network including a cell planning system node which collects data from the telecommunication system relating to the location of the mobile stations (page 2, par. [0023-0025]; **“in Fig. 2, the cellular network providing more effective management of a radio link the system and a mobile station based on the cell structure and allowing a communication link to be**

split between two types of cells, such that control data is passed over a control sub channel, and cover the user moving around without the need for an excessive number of handovers between cells”), their path losses on their radio channels and the services they use, and wherein said cell planning system node comprises data collecting and calculation equipment which predicts an optimal place for a new base station “page 3, par. [0034]; **to allow roaming users to connect directly to their home network for control when users moving into new base station such a hand over”)** when the cell otherwise will be overloaded (page 1, par. [0006]).

Allowable Subject Matter

3. **Claims 14-15, and 19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 14, 19, the prior art of record does not disclose the method of claim 13, wherein maximizing the function $x_{sub.opt}, y_{sub.opt} = \max f(BR_{sub.n}/PL_{sub.n}, x_{sub.n}, y_{sub.n})$ for all n gives the optimal site location for the new base station, where n is an index number for the mobile users of the cell, $BR_{sub.n}$ is the bit rate used, $PL_{sub.n}$ is the path loss and $X_{sub.n}$, $y_{sub.n}$ is the

location of the user n.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUOC H. DOAN whose telephone number is 571-272-7920. The examiner can normally be reached on 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VINCENT HARPER can be reached on 571-272-7605.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner; PHUOC DOAN
02/23/08
/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617